



# THE DATASHEET OF MSCD36-16



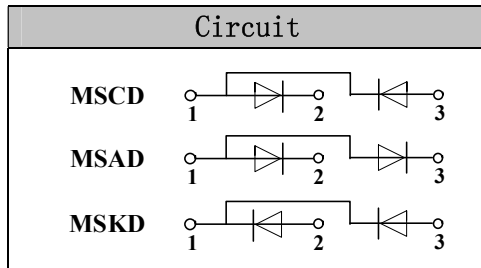


## Glass Passivated Rectifier Diode Modules

**VRRM** 800 to 1800V  
**IFAV** 36 Amp

### Applications

- Non-controllable rectifiers for AC/AC converters
- Line rectifiers for transistorized AC motor controllers
- Field supply for DC motors



### Features

- Blocking voltage:800 to 1800V
- Heat transfer through aluminum oxide DBC ceramic isolated metal baseplate
- Glass passivated chip
- UL E243882 approved

### Module Type

TYPE			VRRM	VRSM
MSCD36-08	MSAD36-08	MSKD36-08	800V	900V
MSCD36-12	MSAD36-12	MSKD36-12	1200V	1300V
MSCD36-16	MSAD36-16	MSKD36-16	1600V	1700V
MSCD36-18	MSAD36-18	MSKD36-18	1800V	1900V

### Maximum Ratings

Symbol	Conditions	Values	Units
IFAV	Single phase ,half wave 180° conduction Tc=104℃	36	A
IF(RMS)	Single phase ,half wave 180° conduction Tc=100℃	52	A
IFSM	t=10mS Tvj =45℃	650	A
i <sup>2</sup> t	t=10mS Tvj =45℃	2100	A <sup>2</sup> s
Visol	a.c.50HZ;r.m.s.;1min	3000	V
Tvj		-40 to +150	℃
Tstg		-40 to +125	℃
Mt	To terminals(M5)	3±15%	Nm
Ms	To heatsink(M6)	5±15%	Nm
Weight	Module (Approximately)	100	g

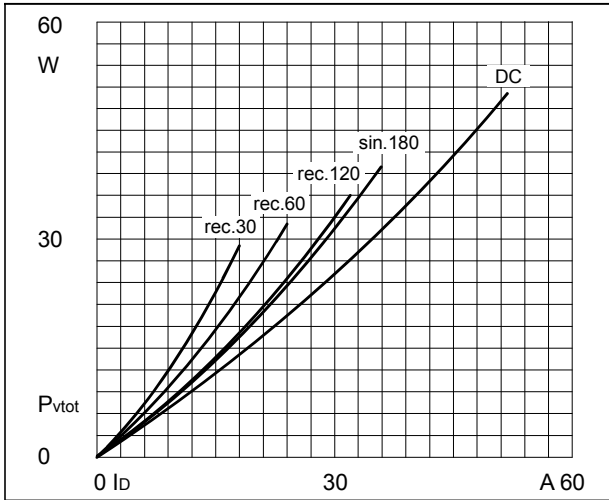
### Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	Per diode	1.0	℃/W
Rth(c-s)	Module	0.1	℃/W

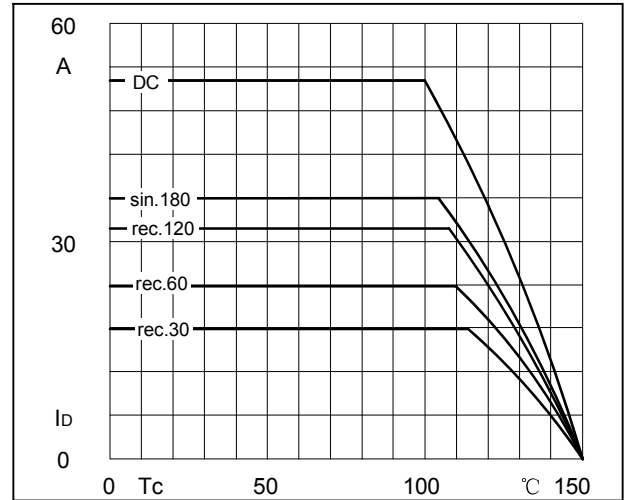
### Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
VFM	T=25℃ IF =100A	—	1.18	1.25	V
IRD	Tvj=150℃ VRD=VRRM	—	—	5	mA

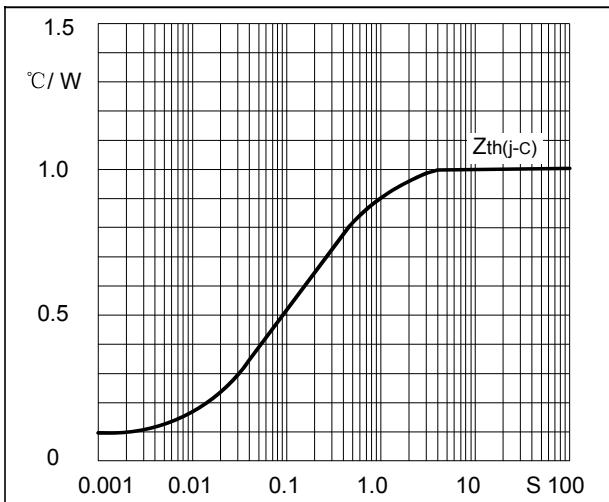
## Performance Curves



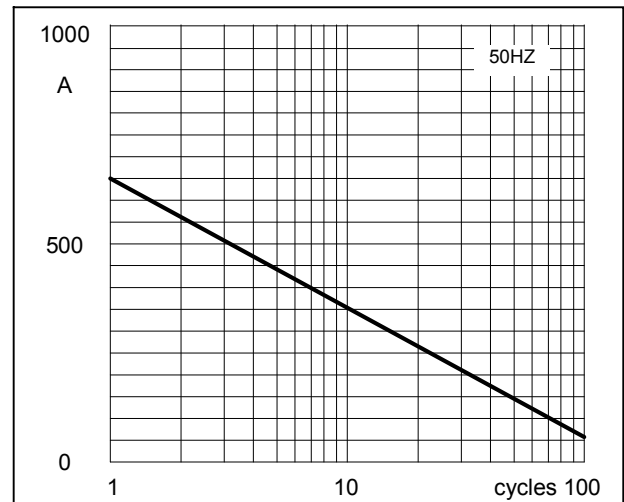
**Fig1. Power dissipation**



**Fig2. Forward Current Derating Curve**



**Fig3. Transient thermal impedance**



**Fig4. Max Non-Repetitive Forward Surge Current**

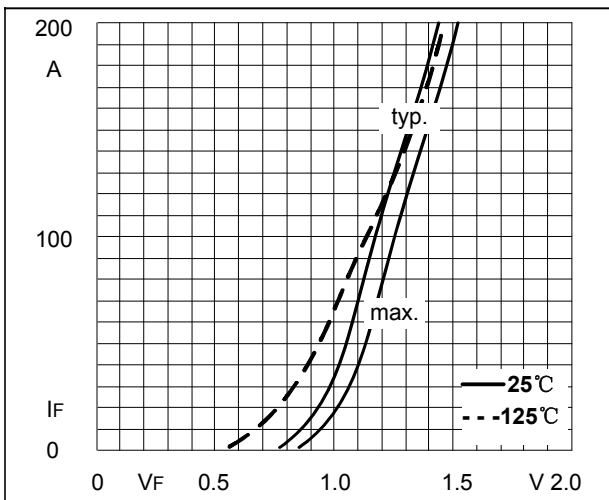
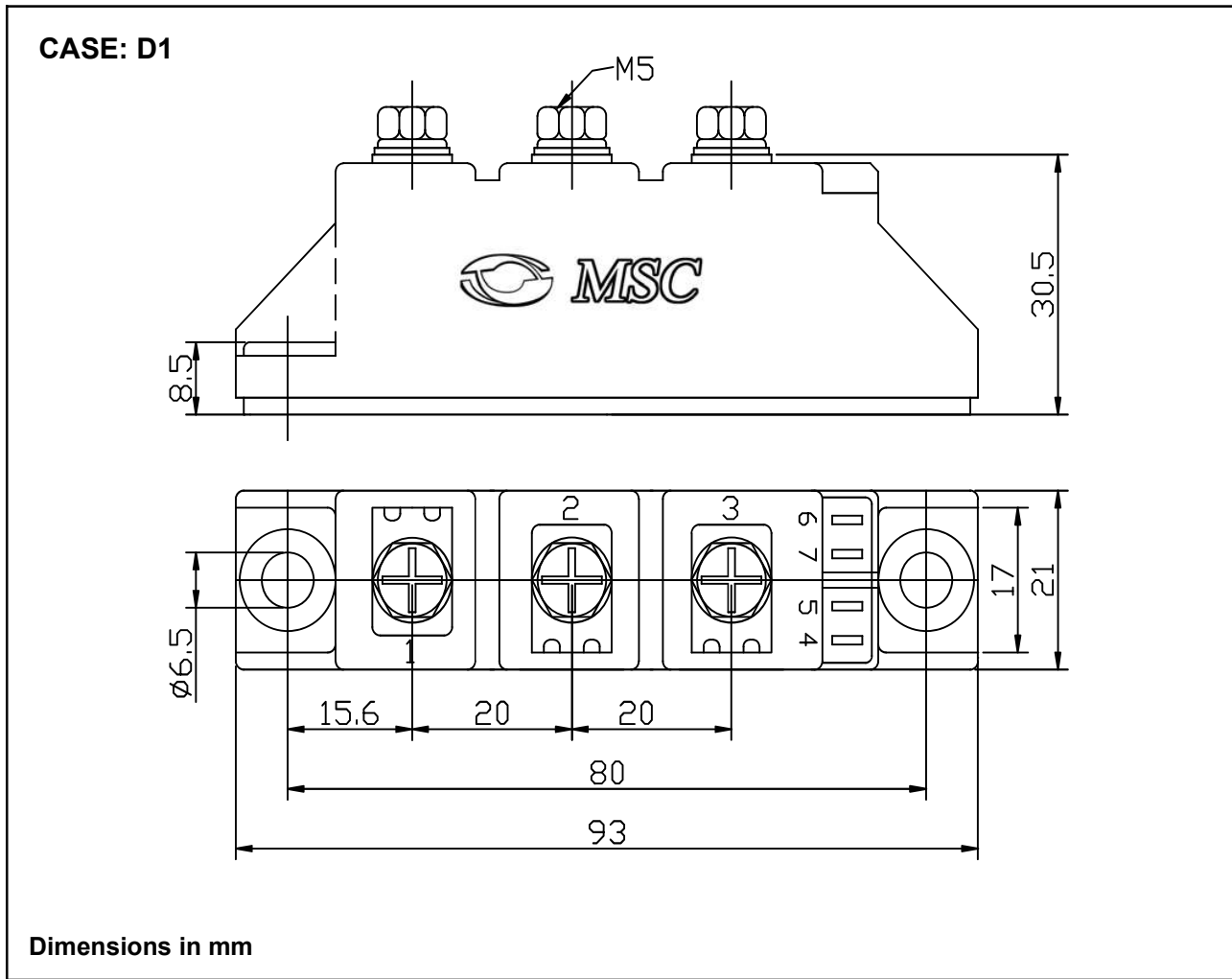


Fig5. Forward Characteristics

## Package Outline Information



## Looking for pricing, stock, or lifecycle information?

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